

ECAT Chemistry Chapter 5 Atomic Structure Online Test

Sr	Questions	Answers Choice
1	The principle quantum number describes	A. The distance from the nucleus B. The shape of the orbital C. The orientation of the orbital D. The spin of the electron
2	The wave length of electron as wave is 0.5 nm. What is the wave length in meter	A. 5×10^{-9} B. 5×10^{-12} C. 5×10^{-6} D. 5×10^{-10}
3	Orbitals having same energy are called	A. Hybrid orbitals B. Valence orbitals C. Degenerate orbitals D. D-orbitals
4	When 3p orbital is complete, the entering electron goes into	A. 4s B. 3d C. 4p D. 4f
5	In the ground state of an atom, the electron is present	A. In the nucleus B. In the second shell C. Nearest to the nucleus D. Farthest from the nucleus
6	Quantum number values for 2p orbitals are	A. $n = 2, l = 1$ B. $n = 1, l = 2$ C. $n = 1, l = 0$ D. $n = 2, l = 0$
7	The charge of an electron is determined by	A. J.J. Thomson B. Crooks C. Perrin D. R.A. Millikan
8	Pauli's principle is applicable to	A. Degenerate orbits B. Two electrons in the same orbital C. One electron D. None
9	The wave number of the light emitted by a certain source is $2 \times 10^6 \text{ m}^{-1}$. The wavelength of this light will be	A. 500 nm B. 500 m C. 200 nm D. $5 \times 10^7 \text{ m}$
10	The nature of the positive rays depend on	A. The nature of the electrode B. The nature of the discharge tube C. The nature of the residual gas D. All of the above
11	$E = hv$ is the	A. Spectral equation B. Plank's equation C. de Broglie's equation D. None of these
12	Splitting of spectral lines when atoms are subjected to strong electron field is called	A. Zeeman effect B. Stark effect C. Photoelectric effect D. Compton effect
13	The radius of first orbit of hydrogen atom	A. 0.329 \AA B. 0.429 \AA C. 0.529 \AA D. 0.229 \AA
14	Which of the following is not charged particle	A. Proton B. Electron C. Neutron D. Hydrogen nucleus
15	Which of the following is not a sub-atomic particle	A. Electron B. Proton C. Neutron D. Deuteron

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Which of the following is not a property of cathode rays

- A. They can produce x-rays when they strike a heavy metal anode
- B. They can cause reduction reaction
- C. They produce fluorescence in rare earth and minerals
- D. They comprise neutral particles